

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	<u>1</u>	DATED	<u>8/21/2025</u>	ADDENDUM NO.	_____	DATED	_____
ADDENDUM NO.	_____	DATED	_____	ADDENDUM NO.	_____	DATED	_____
ADDENDUM NO.	_____	DATED	_____	ADDENDUM NO.	_____	DATED	_____

Number

Description

1 Revised NTB No. 6917; Amendment EBSx Download Required.

TOTAL ADDENDA: 1

(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

Contractor

BY _____

Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President

Address

Secretary

Address

Treasurer

Address

The following is my (our) itemized proposal.

STBG-9999-06(405)/ 109670301000

Lamar County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 -NOTICE TO BIDDERS NO. 6917

CODE: (SP)

DATE: 08/21/2025

SUBJECT: Scope of Work

PROJECT: STBG-9999-06(405) / 109670301 -- Lamar County

The contract documents do not include an official set of construction plans but may, by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Attached Drawings".

Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment. Work for which no pay item is provided will not be paid for directly and shall therefore be considered an absorbed item of work.

It shall be the responsibility of the Contractor to protect existing structures from damage which might occur during construction. The Contractor shall replace or repair, as directed by the Director of Structures, State Bridge Engineer, any structures damaged during the life of the contract. No payment will be made for replacement or repair of damaged items.

All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure. The Contractor shall verify all dimensions of the existing structure prior to beginning work.

During construction, care shall be exercised to ensure that no debris falls into the roadway crossing below the structures. All debris, including any material that has accumulated on the bridge caps, shall become the property of the Contractor and shall be removed from the construction site.

Any areas disturbed by the Contractor shall be stabilized by the end of the Project at no additional cost to the State.

Work on the project shall consist of the following repairs to bridge numbers 47.9 (12281) located on Old Highway 11 over I-59 and 61.9A (12283) and 61.9B (12284) located on Richburg Road over I-59 in Lamar County.

Scope of Work – Bridge 47.9 (12281)

- Remove and replace bearings at specified locations in accordance with the Attached Drawings.
- Remove joint armor and replace with preformed joint seal at all joints
- Repair spall locations with epoxy mortar in accordance with the notes in this document and

the details shown in the Attached Drawings.

- Install polymer cement surface system on bridge deck in accordance with the notes in this document.
- Apply FRP wrap to damaged beams in accordance with the Attached Drawings.
- Remove and rebuild portion of end wall in accordance with the Attached Drawings.
- Clean all caps.
- Clean bridge deck and drains

Scope of Work – Bridge 61.9A (12283)

- Remove and replace bearings at specified locations in accordance with the Attached Drawings.
- Remove joint armor and replace with preformed joint seal at all joints
- Repair spall locations with epoxy mortar in accordance with the notes in this document and the details shown in the Attached Drawings.
- Install polymer cement surface system on bridge deck in accordance with the notes in this document.
- Apply FRP wrap to damaged beams in accordance with the Attached Drawings.
- Remove and rebuild portion of end wall in accordance with the Attached Drawings.
- Clean all caps.
- Clean bridge deck and drains

Scope of Work – Bridge 61.9B (12284)

- Remove and replace bearings at specified locations in accordance with the Attached Drawings.
- Remove joint armor and replace with preformed joint seal at all joints
- Repair spall locations with epoxy mortar in accordance with the notes in this document and the details shown in the Attached Drawings.
- Install polymer cement surface system on bridge deck in accordance with the notes in this document.
- Apply FRP wrap to damaged beams in accordance with the Attached Drawings.
- Remove and rebuild portion of end wall in accordance with the Attached Drawings.
- Apply undersealing to fill void under End Bent No. 1R in accordance with the notes in this document.
- Clean all caps.
- Clean bridge deck and drains

Joint & Endwall Removal and Replacement:

Removal of the existing joint material shall be performed at all End Bents and Intermediate Bents with existing joints per attached detail drawings and shall be paid for under pay item 202-B: Removal of Joint Material. Removal of the concrete endwall shall be performed at all End Bents per attached detail drawings and shall be paid for under pay item 907-824-PP: Bridge Repair, Endwall Repair, Per Plans. Saw cuts required shall be paid for under pay item 907-823-B: Saw Cut, Type I. Deck blockout section to be restored with elastomeric concrete shall be paid for under pay item 907-824-PP: Bridge Repair, Elastomeric Concrete. Existing joint material shall be replaced with preformed joint seal in accordance with Special Provision 907-823. The joints shall be sealed by

one of the three approved Manufacturers listed in Special Provision 907-823 and installed according to the Manufacturer's specifications. Joint repair after the removal of existing joint material and placement of elastomeric concrete shall be paid for under pay item 907-808-A: Joint Repair Without Epoxy. All new preformed joints shall be paid for under pay item 907-823-A: Preformed Joint Seal, Type I.

Cap Cleaning and Bridge Deck Cleaning:

Cap cleaning shall be performed in accordance with Subsection 907-824.03.3. This item of work shall be paid for under pay item 907-824-C: Cap Cleaning. The bridge deck and gutters shall be swept clean upon completion of the Project. This shall be considered an absorbed item of work.

Bearing Replacements:

Bearings at Bridges 12281, 12283, & 12284 shall be replaced in accordance with Subsection 907-824.03.4 and the Attached drawings. Payment for this work shall be made under pay item 907-824-D: Bearing Replacements.

Prior to construction, certification for all welders and a procedure for storage and handling of welding electrodes to be used on this project shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for approval. All welding shall be performed by the electric arc process and shall conform to the ANSI/AASHTO/AWS D1.5 Bridge Welding Code. All steel plates shall conform to ASTM A709 Grade 50. All steel plates shall be new.

All bearing plates shall be hot-dip galvanized in accordance with ASTM A123. In no case shall laminated pads be field cut. Bearing area on top of cap shall be cast smooth and true to grade. Steel plates in bearing pads shall conform to ASTM A 1011 Grade 36, Type 1. The testing acceptance procedure shall be in accordance with Subsection 714.10.6 of the Standard Specifications. Elastomer shall have a hardness of 50 durometer with a minimum shear modulus at 73°F of 0.095 ksi and a maximum shear modulus at 73°F of 0.130 ksi.

General Epoxy Repairs:

General epoxy repair shall be performed in accordance with Subsection 907-824.03.1 and with the approved materials outlined in Subsection 907-824.02.1. All work and material required to perform this item of work shall be paid for under pay item 907-824-A: General Epoxy Repair.

This item shall be bid such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.

Contact areas where new epoxy mortar or concrete is placed against old concrete shall be cleaned then coated with an approved epoxy binder designed to bond new concrete to old. The binder shall be applied in accordance with the Manufacturer's recommendations.

Polymer Cement Surface System:

Polymer cement surface system (PCSS) repair limits shall extend from gutter to gutter within the joints of End Bents No. 1 & 7 (12281), End Bents No. 1L & 4L (12283), and End Bents No. 1R & 4R (12284). Installation of PCSS shall be performed in accordance with Special Provision 907-417.

The patterning of the PCSS shall be one of the following types:

1. Raised Checkerboard Pattern
2. Raised Hexagonal Pattern
3. Raised Staggered Hexagonal Pattern

The pattern shall be submitted to the Director of Structures, State Bridge Engineer for approval prior to any work being performed. This work will be paid for under pay item 907-417-A: Polymer Cement Surface System.

Undersealing:

Voids under end bent cap and approach pavement under End Bent 1R on Bridge 12284 shall be filled with injectable urethane compound material meeting the required properties outlined in Special Provision Section 907-420.

Prior to injection, the site shall be prepared according to Manufacturer's recommendations. Urethane compound shall be installed in strict accordance with Manufacturer's instructions.

All costs associated with filling voids underneath and behind end bent caps with urethane compound shall be included in the price for pay item 907-420-A: Undersealing.

The accepted quantities will be paid for per pound of urethane compound material as reported on packaging.

Fiber Reinforced Polymer (FRP) Wrap:

After all the strands and spalls are repaired on beams shown on the attached drawings, the repair locations shall be wrapped with Bi-directional FRP wrap in accordance with the attached drawings.

FRP wrap shall be applied in accordance with Subsection 907-824.03.2 and with the approved products outline in Subsection 907-824-02.2. All labor, materials, epoxy repair, and surface preparation associated with the installation of FRP wraps shall be included in pay item 907-824-B: FRP Wrap, Bi-directional.

1. Prior to installation of FRP wraps, the Contractor shall repair concrete spall areas in accordance with the epoxy mortar repair notes. Hammer used for removal of unsound concrete shall be limited to 15 pounds.
2. The fibrous reinforcement system shall be bi-directional and have a minimum tensile strength of 2.1 kips/in.

Contractor Submittals:

Prior to any construction or fabrication, the Contractor shall comply with the following submittal requirements.

FRP Wrap Submittal:

Before repairing any delaminated areas, the Contractor shall submit a FRP repair procedure to

the Director of Structures, State Bridge Engineer for review and approval.

Polymer Cement Overlay Submittal:

The pattern of the Polymer Cement Surface System shall be submitted to the Director of Structures, State Bridge Engineer for approval prior to any work being performed.

Field Verification Submittal:

All dimensions of the existing bearing assemblies and caps, finish grades of existing bridges, dimensions of open joint widths, and any other element that will affect the work items described herein shall be field verified.

Bearing Pad Shop Drawing Submittal:

The Contractor shall submit shop drawings of the new bearing pads for approval by the Director of Structures, State Bridge Engineer.

Welding Submittal:

- a. Certification for all welders
- b. Welding procedures
- c. Procedure for storage and handling of welding electrodes, wires, and flux
- d. A flux recovery procedure if applicable

Jacking Plan Submittal:

The Contractor shall submit a set of bracing and jacking arrangement plans along with design calculations and all assumptions. The Contractor shall employ the service of a Mississippi registered Professional Engineer knowledgeable in the field of bridge design. The submitted plans shall bear the seal of the Professional Engineer.

Maintenance of Traffic:

The Contractor shall erect and maintain construction signing and provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas in accordance with the Traffic Control Plan. Payment shall be included in the price bid for pay item 907-618-A: Maintenance of Traffic.

GENERAL NOTES

BRIDGES AND WALLS

- 1) STORAGE OF FLAMMABLE MATERIALS WILL NOT BE ALLOWED UNDER ANY BRIDGE STRUCTURES WITHOUT WRITTEN APPROVAL FROM THE PROJECT ENGINEER. SEE NOTICE TO BIDDERS ENTITLED "MATERIAL STORAGE UNDER BRIDGES" FOR MORE INFORMATION.

DRAINAGE STRUCTURES

- 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING STRUCTURES SUCH AS, BUT NOT LIMITED TO, PIPES, INLETS, APRONS, AND BRIDGES FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

EARTHWORK

- 3) VOIDS CREATED BY THE REMOVAL OF, BUT NOT LIMITED TO, POSTS, CONCRETE ANCHORS, AND FOOTINGS SHALL BE BACKFILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF **THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION**, THE COST OF WHICH WILL BE ABSORBED IN OTHER ITEMS BID.

TRAFFIC CONTROL - TEMPORARY

- 4) THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFIC CONTROL PLANS, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
- 5) ALL TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL COMPLY WITH PART VI OF **THE MUTCD** (LATEST EDITION).
- 6) ALL PLASTIC DRUMS SHALL HAVE A BALLASTING COLLAR MADE FROM RECYCLED TRUCK TIRES OR OTHER SUITABLE MATERIAL.
- 7) FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
- 8) THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTOR FROM ADJACENT PROJECT(S) IN IMPLEMENTING THE TRAFFIC CONTROL PLAN AS DIRECTED BY THE ENGINEER. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.
- 9) THE CONTRACTOR SHALL COVER OR REMOVE ANY TEMPORARY TRAFFIC CONTROL SIGNS SHOWN IN THE TRAFFIC CONTROL PLAN THAT DO NOT APPLY TO THE CURRENT PHASE.
- 10) THE RETROREFLECTIVE SIGN SHEETING ON RIGID, TEMPORARY TRAFFIC CONTROL (ORANGE) SIGNS SHALL BE MINIMUM TYPE IX.

MISCELLANEOUS

- 11) SOME WORK IS REQUIRED OUTSIDE THE PROJECT LIMITS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR SUCH WORK EXCEPT AS PROVIDED BY SPECIFIC PAY ITEMS INCLUDED IN THE PLANS.
- 12) THE CONTRACTOR SHALL COORDINATE AND CONDUCT WORK AT LOCAL ROADS AND DRIVEWAYS IN A MANNER SUCH THAT ACCESS IS NOT INTERRUPTED UNNECESSARILY. ACCESS SHALL BE PRESERVED IN THE BEST MANNER POSSIBLE. COORDINATION AND COMMUNICATION WITH LANDOWNERS MAY BE NECESSARY TO PREVENT INTERRUPTION OF DRIVEWAY ACCESS.

NOTICE:
THE NOTES CONTAINED HEREON ARE SPECIFIC TO THE SUBJECT PROJECT AND SHOULD BE REVIEWED IN DETAIL BY THE CONTRACTOR, PER SECTION 102.05 OF THE STANDARD SPECIFICATIONS. THE BIDDER IS REQUIRED TO EXAMINE CAREFULLY THE SITE OF THE PROPOSED WORK, THE PROPOSAL, PLANS, STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, NOTICES TO BIDDERS AND CONTRACT FORMS BEFORE SUBMITTING A PROPOSAL.



DESIGNED BY: LEWIS	FMS CON: 109670/301000	PROJECT NO.: STBG-9999-000005	COUNTY: LAMAR
DETAILED BY:			
CHECKED BY:			
DATE:			

Notice to Bidders No. 6917 -- Co	
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SHEET NO. 1

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	LAVAR : 109670-301000	
			Prelim	Final
202-B169	Removal of Joint Material	LF	942	
907-417-A001	Polymer Cement Surface System	SY	1,776	
907-420-A001	Undersealing	LBS	2,000	
202-B240	Removal of Traffic Stripe	LF	3,120	
907-618-A001	Maintenance of Traffic	LS	1	
619-A1002	Temporary Traffic Stripe, Continuous White	LF	1,560	
619-A2002	Temporary Traffic Stripe, Continuous Yellow	LF	1,560	
619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet	SF	96	
619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More	SF	576	
907-619-E3001	Changeable Message Sign	EA	4	
619-G4001	Barricades, Type III, Double Faced	LF	48	
619-G4005	Barricades, Type III, Single Faced	LF	96	
620-A001	Mobilization	LS	1	
907-626-C011	6" Thermoplastic Double Drop Edge Stripe, Continuous White	LF	1,560	
907-626-E004	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow	LF	1,560	
907-627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	20	
907-808-A003	Joint Repair Without Epoxy	LF	942	
907-823-A001	Preformed Joint Seal, Type I	LF	574	
907-823-B001	Saw Cut, Type I	LF	633	
907-824-A003	General Epoxy Repair	SF	36	
907-824-B003	FRP Wrap, Bi-directional	SF	540	
907-824-C001	Cap Cleaning	EA	15	
907-824-D001	Bearing Replacements	EA	96	
907-824-PP007	Bridge Repair, Elastomeric Concrete	CY	11	
907-824-PP008	Bridge Repair, Endwall Repair	LF	156	

- 1 INCLUDES 445 LF FOR BR. 47.9 (12281), 249 LF FOR BR. 61.5A (12283), AND 246 LF FOR BR. 61.98 (12284).
- 2 INCLUDES 922 SY FOR BR. 47.9 (12281), 427 SY FOR BR. 61.5A (12283), AND 427 SY FOR BR. 61.98 (12284).
- 3 ENTIRE QUANTITY FOR BR. 61.98 (12284).
- 4 INCLUDES 260 LF FOR BR. 47.9 (12281), 157 LF FOR BR. 61.5A (12283), AND 157 LF FOR BR. 61.98 (12284).
- 5 INCLUDES 333 LF FOR BR. 47.9 (12281), 150 LF FOR BR. 61.5A (12283), AND 150 LF FOR BR. 61.98 (12284).
- 6 INCLUDES 12 SY FOR BR. 47.9 (12281), 12 SY FOR BR. 61.9A (12283), AND 12 SY FOR BR. 61.98 (12284).
- 7 INCLUDES 180 SY FOR BR. 47.9 (12281), 135 SY FOR BR. 61.9A (12283), AND 225 SY FOR BR. 61.98 (12284).
- 8 INCLUDES 7 FOR BR. 47.9 (12281), 4 FOR BR. 61.9A (12283), AND 4 FOR BR. 61.98 (12284).
- 9 INCLUDES 48 FOR BR. 47.9 (12281), 24 FOR BR. 61.9A (12283), AND 24 FOR BR. 61.98 (12284).
- 10 INCLUDES 5 CY FOR BR. 47.9 (12281), 3 CY FOR BR. 61.9A (12283), AND 50 LF FOR BR. 61.98 (12284).
- 11 INCLUDES 780 LF FOR BR. 47.9 (12281), 380 LF FOR BR. 61.5A (12283), AND 390 LF FOR BR. 61.98 (12284).
- 12 INCLUDES 48 LF FOR BR. 47.9 (12281) AND 48 LF FOR BR. 61.9A (12283) AND BR. 61.98 (12284) TOGETHER.
- 13 INCLUDES 24 LF FOR BR. 47.9 (12281) AND 24 LF FOR BR. 61.9A (12283) AND BR. 61.98 (12284) TOGETHER.
- 14 INCLUDES 48 SY FOR BR. 47.9 (12281) AND 48 SY FOR BR. 61.9A (12283) AND BR. 61.98 (12284) TOGETHER.
- 15 INCLUDES 288 SY FOR BR. 47.9 (12281) AND 288 SY FOR BR. 61.9A (12283) AND BR. 61.98 (12284) TOGETHER.
- 16 INCLUDES 10 (5X2 RIMS) FOR BR. 47.9 (12281), 10 (5X2 RIMS) FOR BR. 61.9A (12283) AND BR. 61.98 (12284) TOGETHER.
- 17 TO BE USED AS DIRECTED BY ENGINEER.
- 18



DESIGNED BY: LEWIS

DETAILED BY:

CHECKED BY:

DATE:

COUNTY: LAMAR

PROJECT NO.: STBG-9999-061405

FMS CON: 109670/301000

Notice to Bidders No. 6917 -- Construction

SHEET NO. 2

SHEET NO. 2

SIGNS REQUIRED					SIGNS REQUIRED					SIGNS REQUIRED				
SIGN NO.	SIZE	UNIT AREA REQ'D	AREA FT.	REMARKS	SIGN NO.	SIZE	UNIT AREA REQ'D	AREA FT.	REMARKS	SIGN NO.	SIZE	UNIT AREA REQ'D	AREA FT.	REMARKS
G20-1	60" X 24"	10.00	4	ROAD WORK NEXT XX MILES	R1-1	36" OCTAGON	7.46		STOP	W1-1L	48" X 48"	16.00	4	LOOSE GRAVEL
G20-2	48" X 24"	9.00	12	END ROAD WORK	R1-2	48" OCTAGON	13.25			W1-1R	48" X 48"	16.00	4	LOW SHOULDER
G20-4	36" X 18"	4.50		PILOT CAR FOLLOW ME	R1-2	36" X 36" X 36"	3.90		YIELD	W1-2L	48" X 48"	16.00	4	UNEVEN LANES
M1-1	24" X 24"	4.00		1 OR 2 DIGIT	R1-2	48" X 48" X 48"	6.93			W1-2R	48" X 48"	16.00	4	NO CENTER STRIPE
M1-1	30" X 24"	5.00		3 DIGIT	R1-3	18" X 9"	1.13		3-WAY, 4-WAY, ETC.	W1-3L	48" X 48"	16.00	4	
M1-1	24" X 24"	4.00		1 OR 2 DIGIT	R1-3	24" X 12"	2.00			W1-3R	48" X 48"	16.00	4	
M1-4	30" X 24"	5.00		3 DIGIT	R2-1	24" X 30"	5.00		SPEED LIMIT	W1-4L	48" X 48"	16.00	4	
M1-5	24" X 24"	4.00		1 OR 2 DIGIT	R2-1	36" X 30"	12.00	4		W1-4R	48" X 48"	16.00	4	
M3-1	24" X 12"	2.00		NORTH-1 OR 2 DIGIT RATE MARKER	R2-1	48" X 60"	20.00	4		W1-5L	48" X 48"	16.00	4	
M3-1	30" X 15"	3.13		WEST-1 OR 2 DIGIT RATE MARKER	R3-1	36" X 36"	9.00			W1-5R	48" X 48"	16.00	4	
M3-2	24" X 12"	2.00		EAST-1 OR 2 DIGIT RATE MARKER	R3-1	48" X 36"	16.00	4		W1-6L	48" X 48"	16.00	4	
M3-2	30" X 15"	3.13		SOUTH-1 OR 2 DIGIT RATE MARKER	R3-2	36" X 36"	9.00			W1-6R	48" X 48"	16.00	4	
M3-3	24" X 12"	2.00		DIGIT RATE MARKER	R3-2	48" X 30"	15.00	4		W1-7	60" X 30"	12.50	4	
M3-3	30" X 15"	3.13		DIGIT RATE MARKER	R3-4	36" X 36"	9.00			W1-7	60" X 30"	12.50	4	
M3-4	24" X 12"	2.00		WEST-1 OR 2 DIGIT RATE MARKER	R3-4	48" X 48"	16.00	4		W1-8L	18" X 24"	3.00		
M3-4	30" X 15"	3.13		EAST-1 OR 2 DIGIT RATE MARKER	R3-5L	30" X 36"	7.50		ONLY	W1-8L	36" X 48"	12.00	4	
M4-8	24" X 12"	2.00		DIGIT RATE MARKER	R3-5R	30" X 36"	7.50		ONLY	W1-8R	18" X 24"	3.00		
M4-8	30" X 15"	3.13		DIGIT RATE MARKER	R3-6R	30" X 36"	7.50			W1-8R	36" X 48"	12.00	4	
M4-9	48" X 36"	12.00	4	DETOUR ↑	R3-7L	30" X 30"	6.25		LEFT LAHE MUST TURN LEFT	W1-9L	48" X 48"	16.00	4	
M4-9BL	48" X 36"	12.00	4	DETOUR ←	R3-7R	30" X 30"	6.25		RIGHT LAHE MUST TURN RIGHT	W1-9L	48" X 48"	16.00	4	
M4-9SL	48" X 36"	12.00	4	DETOUR ↖	R4-1	24" X 30"	5.00		DO NOT PASS	W2-6	36" X 36"	9.00		
M4-9BSL	48" X 36"	12.00	4	DETOUR ↗	R4-1	48" X 60"	20.00	4		W2-6a	48" X 48"	16.00	4	
M4-9BR	48" X 36"	12.00	4	DETOUR ↘	R4-2	24" X 30"	5.00		PASS WITH CAVE	W3-2a	48" X 48"	16.00	4	
M4-9BSR	48" X 36"	12.00	4	DETOUR ↙	R4-2	48" X 60"	20.00	4		W3-3	48" X 48"	16.00	4	
M4-10L	48" X 18"	6.00		DETOUR →	R4-7	48" X 60"	20.00	4		W3-5	48" X 48"	16.00	4	
M4-10R	48" X 18"	6.00		DETOUR ←	R4-8	48" X 60"	20.00	4		W4-3L	48" X 48"	16.00	4	
M4-5	24" X 12"	2.00		TO	R5-1	48" X 48"	16.00	4	DO NOT ENTER	W4-4L	48" X 48"	16.00	4	
M5-1L	21" X 15"	2.19		↖	R5-1a	42" X 30"	8.75		WRONG WAY	W4-2L	48" X 48"	16.00	4	
M5-1R	21" X 15"	2.19		↗	R6-1L	36" X 12"	3.00		ONE WAY	W4-2R	48" X 48"	16.00	4	
M5-2L	21" X 15"	2.19		↘	R6-2L	24" X 30"	5.00		ONE WAY	W4-3L	48" X 48"	16.00	4	
M5-2R	21" X 15"	2.19		↙	R6-2R	24" X 30"	5.00		ONE WAY	W4-6	48" X 48"	16.00	4	
M6-1L	21" X 15"	2.19		↘	R11-2	48" X 30"	10.00	4	ROAD CLOSED	W5-1a	48" X 48"	16.00	4	
M6-1R	21" X 15"	2.19		↙	R11-3a	60" X 30"	12.50	4	ROAD CLOSED	W6-1	48" X 48"	16.00	4	
M6-2L	21" X 15"	2.19		↘	R11-3b	60" X 30"	12.50	4	ROAD CLOSED	W6-2	48" X 48"	16.00	4	
M6-2R	21" X 15"	2.19		↙	R11-4	60" X 30"	12.50	4	ROAD CLOSED	W6-3	48" X 48"	16.00	4	
M6-3	21" X 15"	2.19		↘	R12-1	36" X 48"	12.00	4	ROAD CLOSED	W8-1	48" X 48"	16.00	4	
M6-3	21" X 15"	2.19		↙	R16-3	36" X 48"	12.00	4	ROAD CLOSED	W8-4	48" X 48"	16.00	4	
M6-3	21" X 15"	2.19		↘	R16-3	48" X 60"	20.00	4	ROAD CLOSED	W8-6	48" X 48"	16.00	4	

- NOTES
- ① STANDARD

② SPECIAL (USE WHERE WARRANTED)

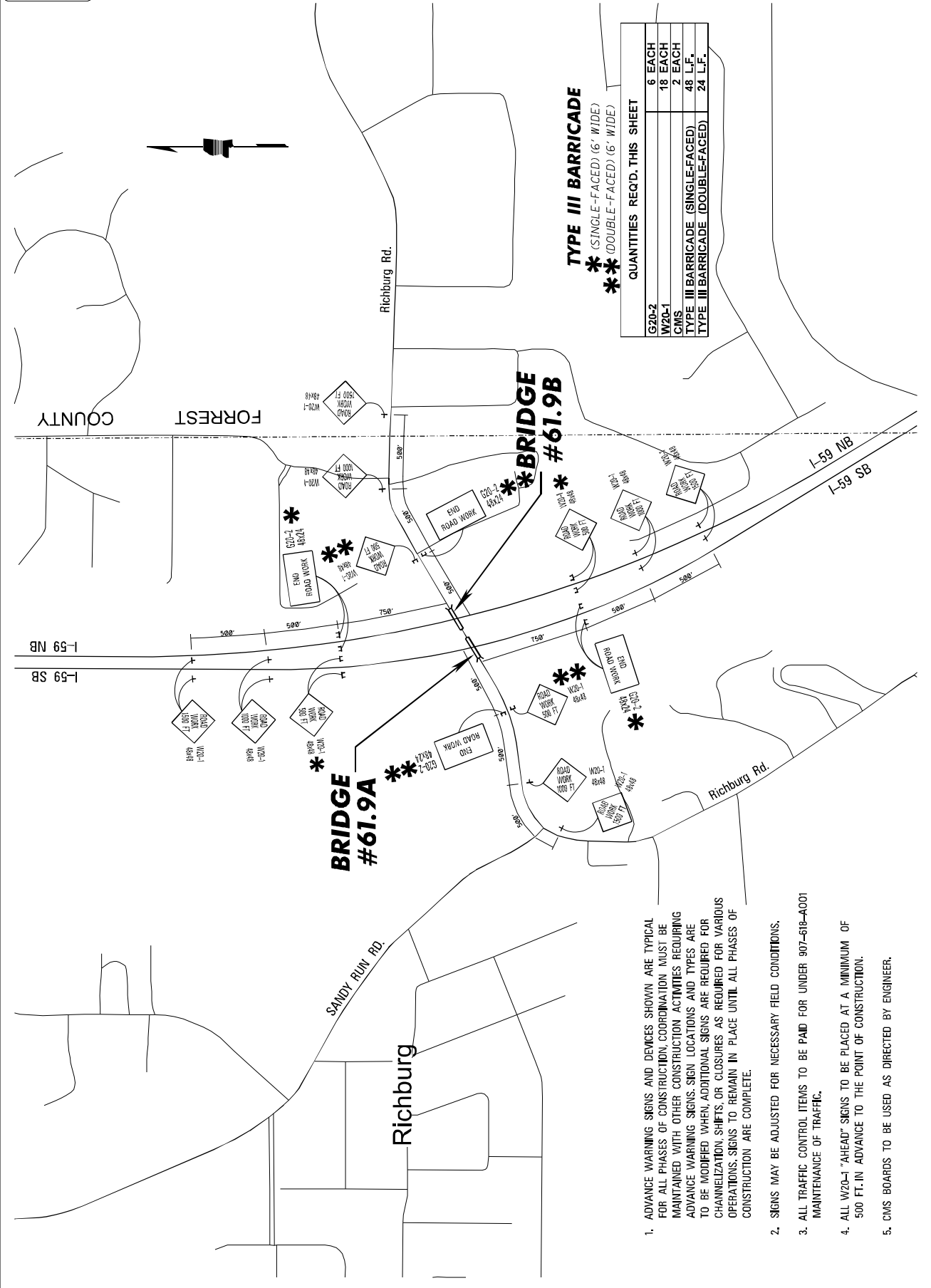
③ INTERSTATE ROUTE MARKER

④ STATE ROUTE MARKER

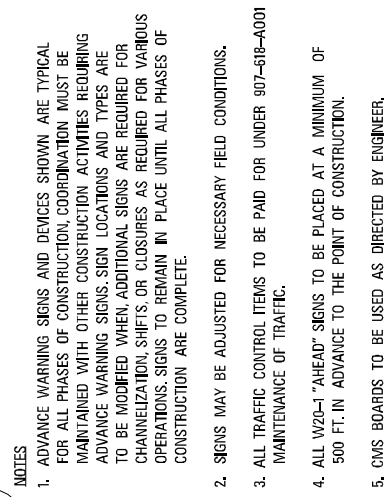
⑤ COLORS OF CARDINAL DIRECTION MARKERS AND DIRECTIONAL ROUTE MARKERS.
- ⑤ BLACK STRIPES ON YELLOW BACKGROUND

⑥ INTERSTATE USE ONLY

⑦ TOP OF SIGN - BLACK LETTERING ON ORANGE BACKGROUND, BOTTOM OF SIGN - BLACK LETTERING ON WHITE BACKGROUND
- THE BACKGROUND OF ALL WARNING SIGNS ("W" SERIES) EXCEPT W10-1 SHALL BE ORANGE. THE W10-1 BACKGROUND SHALL BE YELLOW IN ALL CASES.



1. ADVANCE WARNING SIGNS AND DEVICES SHOWN ARE TYPICAL FOR ALL PHASES OF CONSTRUCTION. COORDINATION MUST BE MAINTAINED WITH OTHER CONSTRUCTION ACTIVITIES REQUIRING ADVANCE WARNING SIGNS. SIGN LOCATIONS AND TYPES ARE TO BE MODIFIED WHEN ADDITIONAL SIGNS ARE REQUIRED FOR CHANNELIZATION, SHIFTS, OR CLOSURES AS REQUIRED FOR VARIOUS OPERATIONS. SIGNS TO REMAIN IN PLACE UNTIL ALL PHASES OF CONSTRUCTION ARE COMPLETE.
2. SIGNS MAY BE ADJUSTED FOR NECESSARY FIELD CONDITIONS.
3. ALL TRAFFIC CONTROL ITEMS TO BE PAID FOR UNDER 907-618-A001 MAINTENANCE OF TRAFFIC.
4. ALL W20-1 "AHEAD" SIGNS TO BE PLACED AT A MINIMUM OF 500 FT. IN ADVANCE TO THE POINT OF CONSTRUCTION.
5. CMS BOARDS TO BE USED AS DIRECTED BY ENGINEER.



QUANTITIES REQ'D. THIS SHEET	
G20-2	6 EACH
W20-1	18 EACH
CMS	2 EACH
TYPE ■ BARRICADE (SINGLE-FACED)	48 L.F.
TYPE ■ BARRICADE (DOUBLE-FACED)	24 L.F.

TYPE III BARRICADE
****** (SINGLE-FACED) (6' WIDE)
****** (DOUBLE-FACED) (6' WIDE)

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR
Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Removal Of Existing Silicone Sealed, Compression, AC Sealed Joint Materials, and Armored Joint Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. Removal of joint materials and any trash and debris (including but not limited to compacted dirt, vegetation and trash) located at any depth within the joint shall be included under this item of work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-B001 SAW CUT, TYPE I
Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal, it is the Contractor's responsibility to ensure that the proper depth is selected based on the Manufacturer's recommendations.

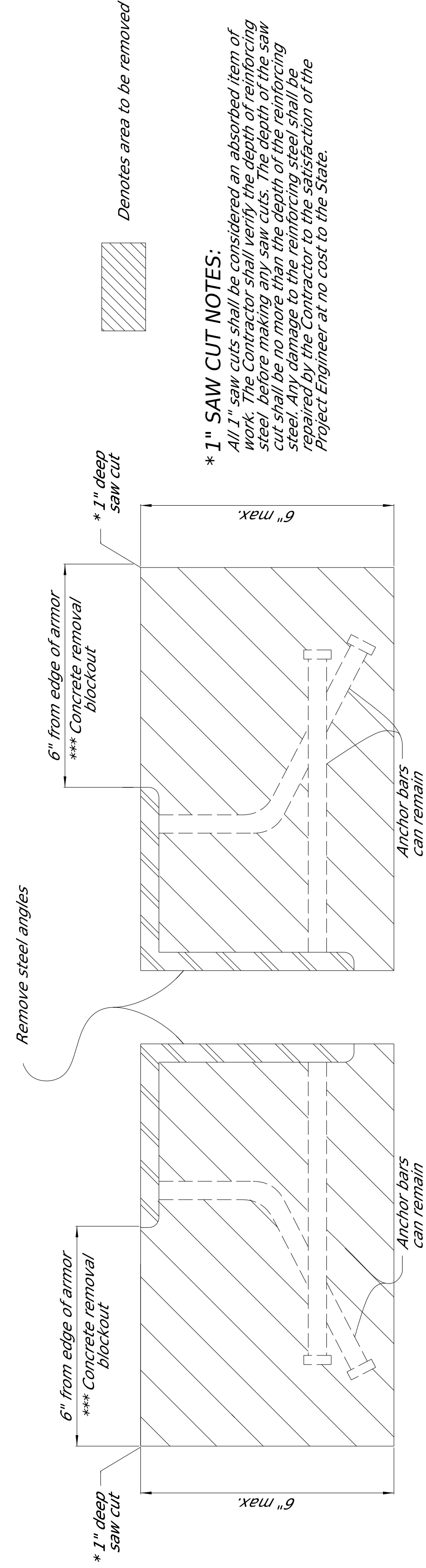
Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

202-B169 REMOVAL OF JOINT MATERIAL
Description: Shall Include The Removal Of Material Associated With Steel Angles And Neoprene Expansion Joints. As Designated In The Detail Drawings Provided. Removal Of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer.

Basis Of Payment: Removal of Steel Angles And Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-824-PP007: BRIDGE REPAIR- ELASTOMERIC CONCRETE
Elastomeric Concrete shall be one of the following products, installed according to the manufacturer's specifications:
A. Poly-Tron Elastomeric Concrete Manufactured by R.J. Watson, Inc. in Alden, NY www.rjwatson.com
B. WaboCrete II Manufactured by Watson Bowman Acme Corp. in Amherst, NY www.wbcorp.com
C. Delcrete Elastomeric Concrete Manufactured by the D.S. Brown Company in North Baltimore, OH www.dsbrown.com
Basis of Payment: This item shall be paid for by the cubic yard under pay item no 907-824-PP007: Bridge Repair, Elastomeric Concrete. The Concrete Removal Area on the bridge deck shall be replaced with Elastomeric Repair, Elastomeric Concrete.

NOTES:
1. The Preformed Joint Seal Shall Be One Of The Following. Installed According To The Manufacturer's Specifications:
A. Silicoflex Joint Sealing System Manufactured By R.J. Watson, Inc. In Alden, NY www.rjwatson.com
B. Wabo SPS Joint System Manufactured By Watson Bowman Acme Corporation In Amherst, NY www.wbcorp.com
C. Silspec SSS Silicone Strip Seal Manufactured By SSI Commercial & Highway Construction Materials www.sscrm.com
2. For Estimating Purposes, The Rj Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.
3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The 1/4" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 1". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than 1" Up To 2". With The Maximum Design Width Being 2 1/2". Preformed Joint Seal, Type III shall be used for joint openings greater than two and one-half inch (2 1/2"), with the maximum joint opening being three and one-half inch (3 1/2"). In Cases Where Design Widths Are Greater Than 4", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



* 1" SAW CUT NOTES:

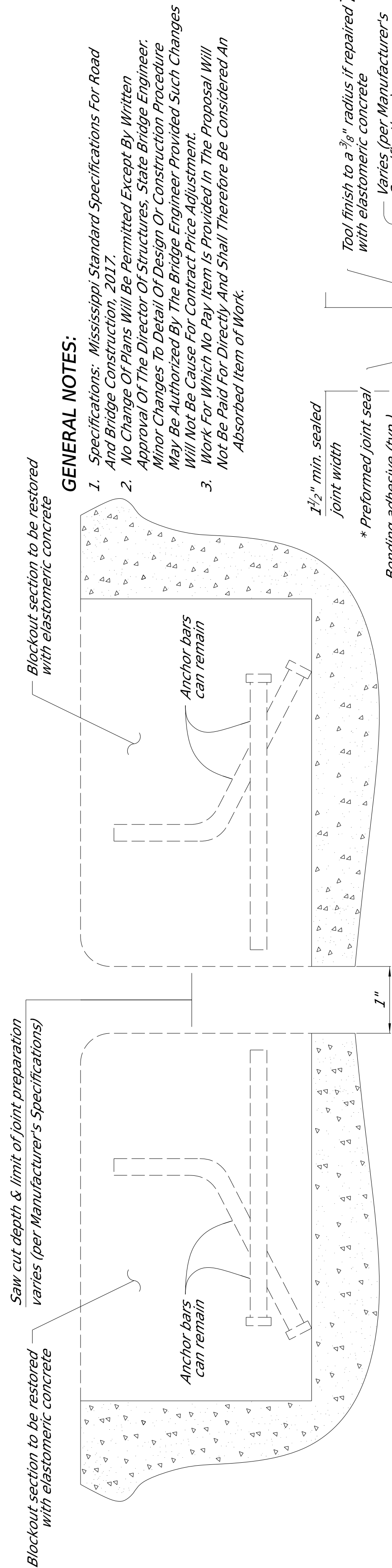
All 1" saw cuts shall be considered an absorbed item of work. The Contractor shall verify the depth of reinforcing steel before making any saw cuts. The depth of the saw cut shall be no more than the depth of the reinforcing steel. Any damage to the reinforcing steel shall be repaired by the Contractor to the satisfaction of the Project Engineer at no cost to the State.

*** CONCRETE REMOVAL BLOCKOUT NOTES:

Removal of the concrete blockout area shall be considered an absorbed item of work under Pay Item No. 202-B169, Removal of Joint Material. The Contractor shall use a hammer no larger than 30 LBs to complete this work.

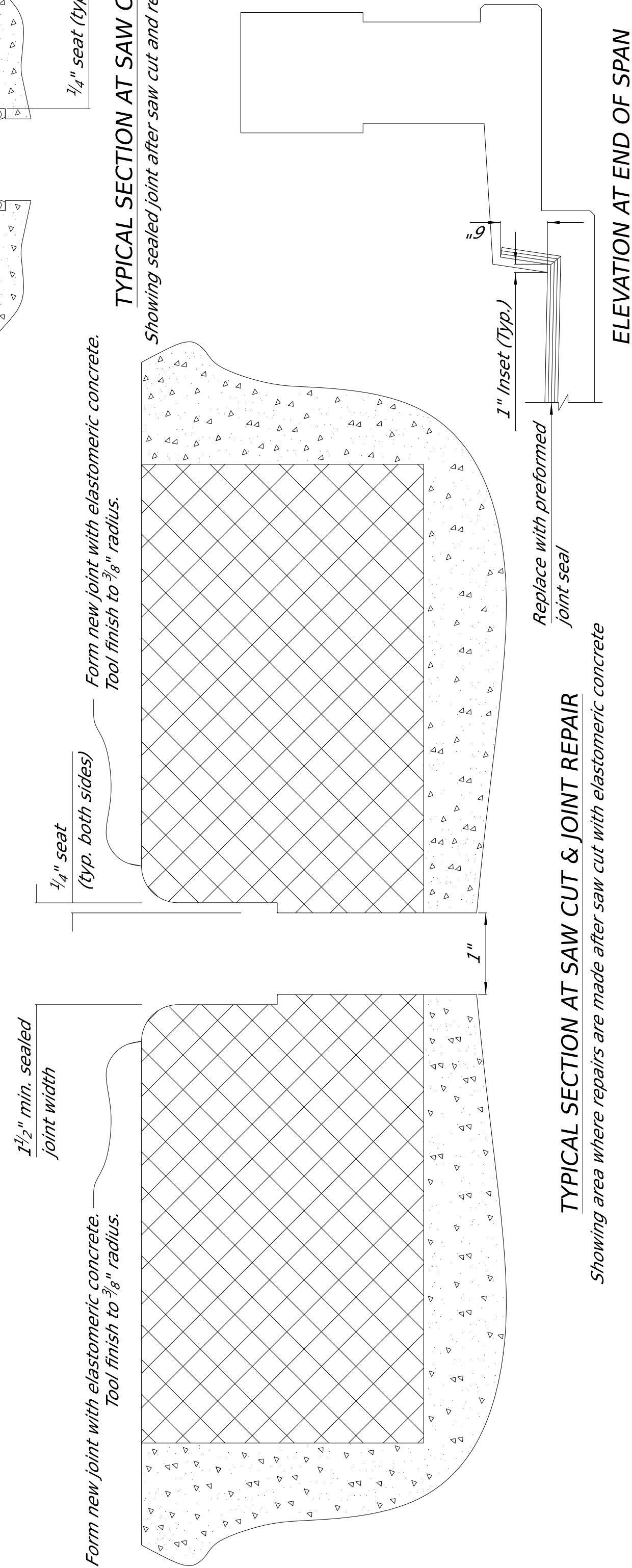
TYPICAL SECTION OF EXISTING JOINT AT INT. BENTS

Showing existing steel angles to be removed and replaced with preformed joint seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF STEEL ANGLES

Showing limits of joint preparation for application of new joint seal materials and reinforcing steel



TYPICAL SECTION AT SAW CUT & JOINT REPAIR

Showing area where repairs are made after saw cut with elastomeric concrete



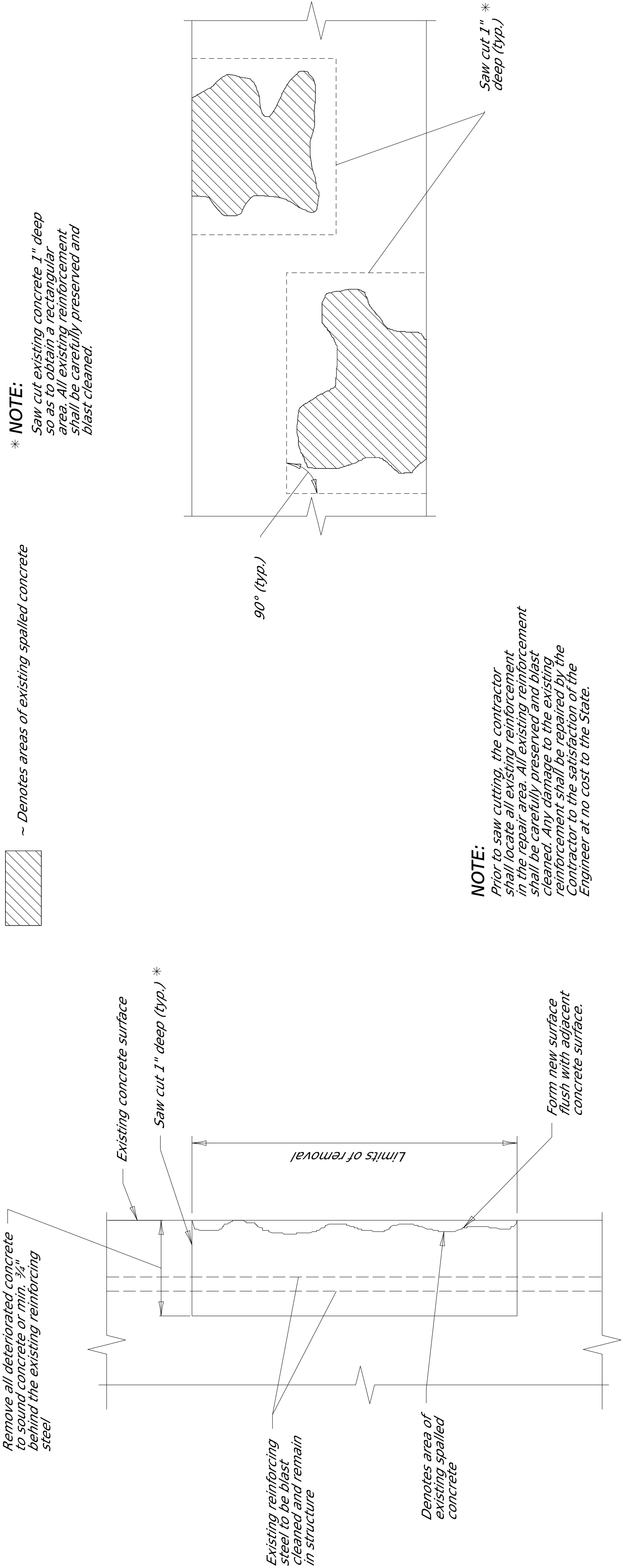
Testing acceptance procedure shall be in accordance with Section 714.10.2 of the Specifications. Elastomer shall have a hardness of 50 durometer with a minimum shear modulus at 75°F of 0.095 ksi and a maximum shear modulus at 73°F of 0.130 ksi. Bearing area on top of cap shall be smooth and true to grade.



Testing acceptance procedure shall be in accordance with Section 714.10.2 of the Specifications. Elastomer shall have a hardness of 50 durometer with a minimum shear modulus at 73°F of 0.095 ksi and a maximum shear modulus at 73°F of 0.130 ksi. Bearing area on top of cap shall be smooth and true to grade.

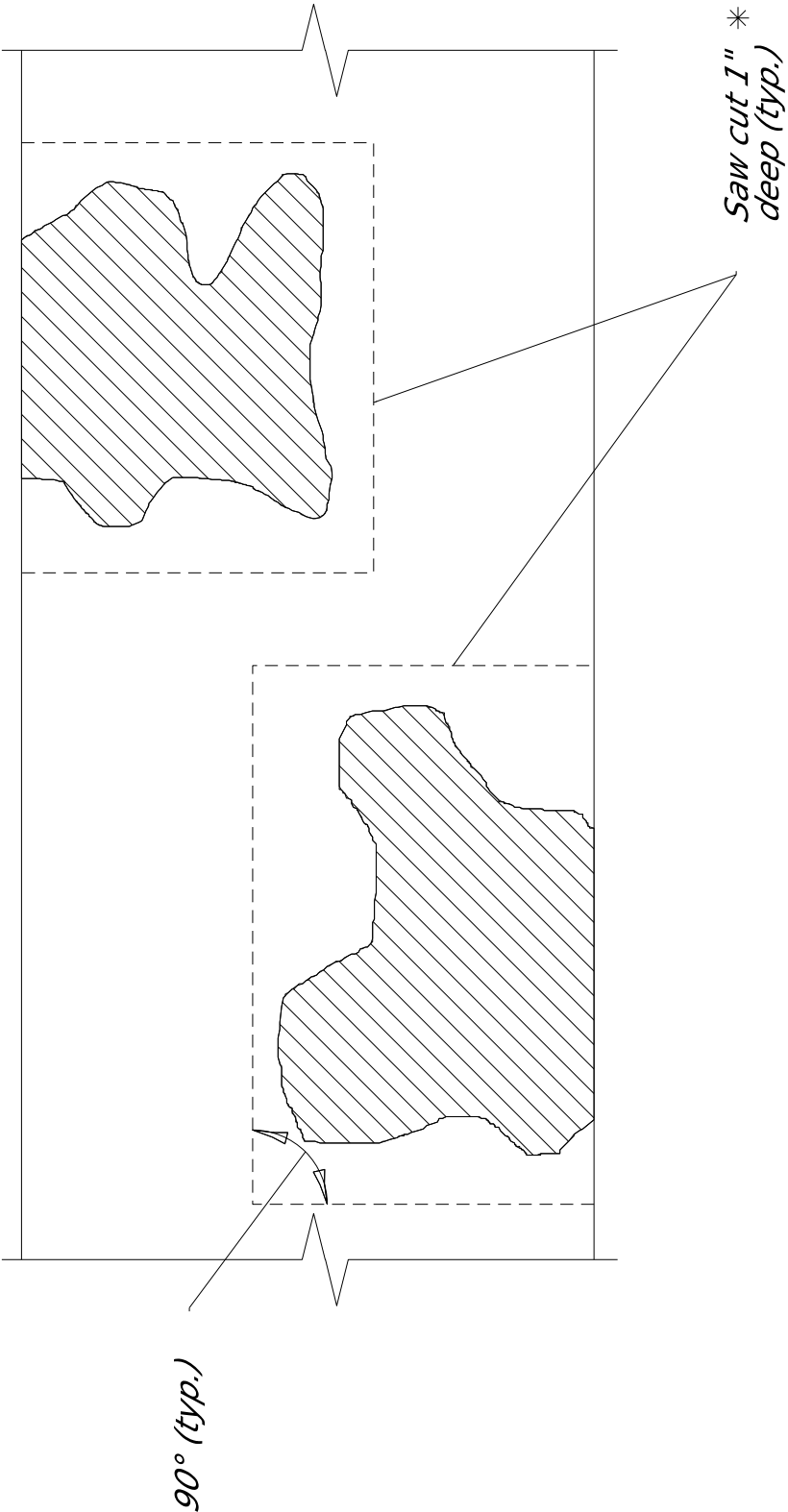


EXISTING BEARING ASSEMBLY DETAILS FOR 70' SPANS ~ BRIDGE 12281

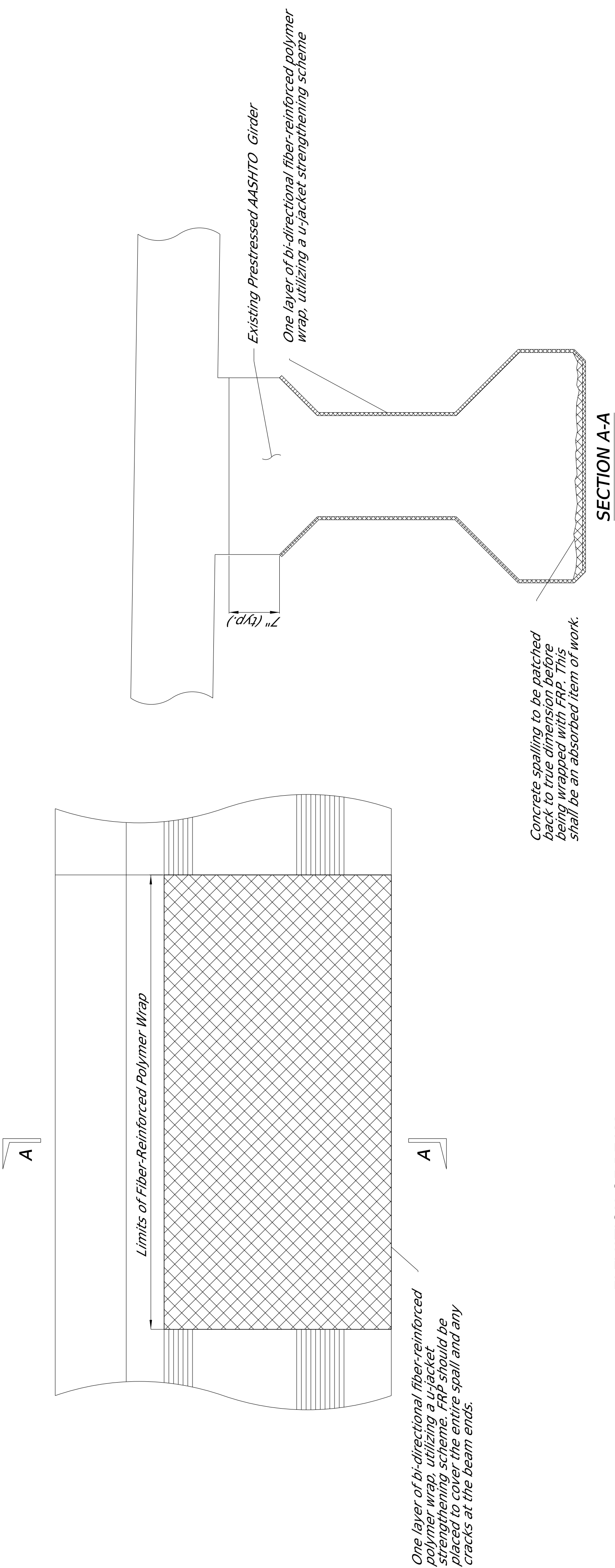


~ Denotes areas of existing spalled concrete

* NOTE:
Saw cut existing concrete 1" deep
as to obtain rectangular
area. All existing reinforcement
shall be carefully preserved and
blast cleaned.



EPOXY REPAIR DETAILS



FRP Locations			
Bridge	Span	Beam No.	Length
12281	2	2	10'-0"
12281	2	4	10'-0"
12283	2	1	5'-0"
12283	2	2	5'-0"
12283	2	4	5'-0"
12284	2	1	10'-0"
12284	2	2	5'-0"
12284	2	3	5'-0"
12284	2	4	5'-0"

NOTES ON ASSOCIATED ITEMS OF WORK:

907-824-PP008 BRIDGE REPAIR, ENDWALL REPAIR, PER PLANS

Description: Shall Include The Work Necessary To Remove And Replace The Damaged Endwall, As Designated In The Detail Drawings Provided. Instead Of Limiting The Repair To The Damaged Section, The Specified Depth Of Endwall Shall Be Removed Along The Entire Width Of The Bridge Deck.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint. Damage Caused To Other Elements Of The Structure Or Roadway While Completing This Item Of Work Shall Be Repaired By The Contractor At No Cost To The State.

Prior To Placing New Concrete, All Concrete Surfaces That Will Be In Contact With The New Concrete Shall Be Painted With An Approved Epoxy Binder Designed To Bond New Concrete To Old.

New Concrete in the bridge endwall shall be Elastomeric Concrete. Elastomeric Concrete shall be one of the Following Products listed Below, or An Approved Equal, Installed According to the Manufacturer's Specifications. The Elastomeric Concrete used to restore the endwall shall be absorbed under 907-824-PP008:Bridge Repair, Endwall Repair.

907-824-PP007: BRIDGE REPAIR, ELASTOMERIC CONCRETE

Description: Elastomeric Concrete shall be one of the following products, installed according to the manufacturer's specifications:

- A. Poly-Ton Elastomeric Concrete
Manufactured by R.J. Watson, Inc. in Alden, NY
www.rjwatson.com
- B. WaboCrete II
Manufactured by Watson Bowman Acme Corp. in Amherst, NY
www.wbacorp.com
- C. Delcrete Elastomeric Concrete
Manufactured by the D.S. Brown Company in North Baltimore, OH
www.dsbrown.com

Basis of Payment: This item of work shall be paid for by the cubic yard under pay item no. 907-824-PP007: Bridge Repair, Elastomeric Concrete.

The 6" Deep Concrete Removal Area on the bridge deck shall be replaced with Elastomeric Concrete. This item of work shall be paid for under pay item no. 907-824-PP007: Bridge Repair, Elastomeric Concrete.

202-B169 REMOVAL OF JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Steel Angles And Neoprene Expansion Joints. As Designated In The Detail Drawings Provided. Removal Of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer.

Basis Of Payment: Removal of Steel Angles Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-808-A003 JOINT REPAIR WITHOUT EPOXY

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Removal Of Existing Silicone Sealed, Compression, AC Sealed Joint Materials, And Armored Joint Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. Removal of joint materials and any trash and debris (including but not limited to compacted dirt, vegetation and trash) located at any depth within the joint shall be included under this item of work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-B001 SAW CUT, TYPE I

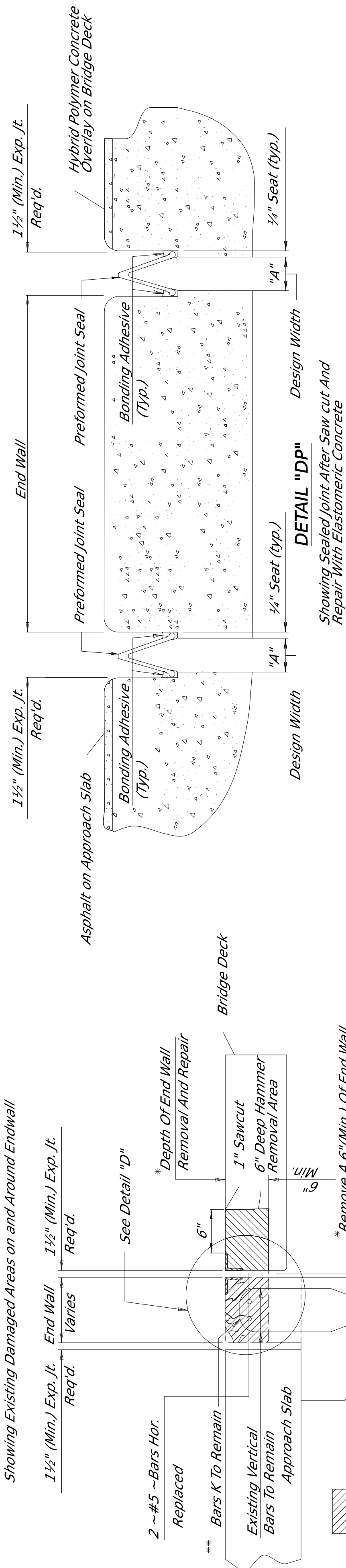
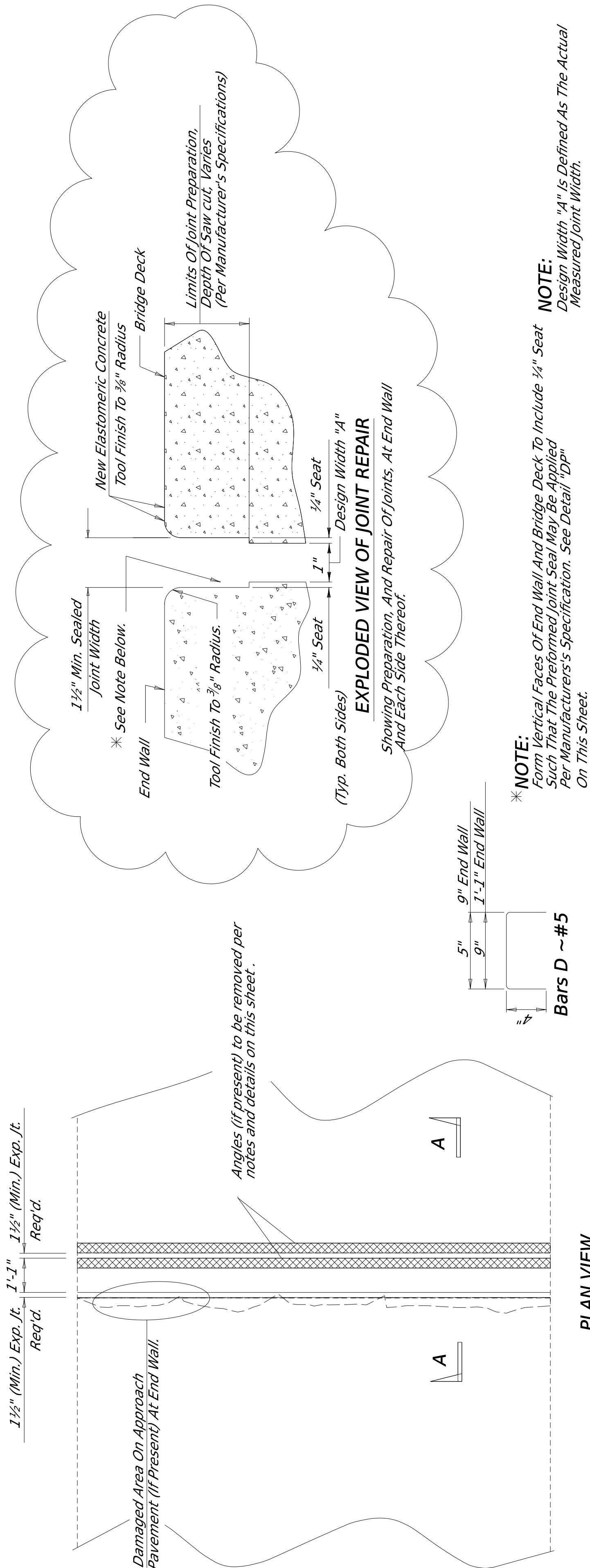
Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint. It is the Contractor's responsibility to ensure that the proper depth is selected based on the Manufacturer's Recommendations.

907-823-A001 PREFORMED JOINT SEAL, TYPE I

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline

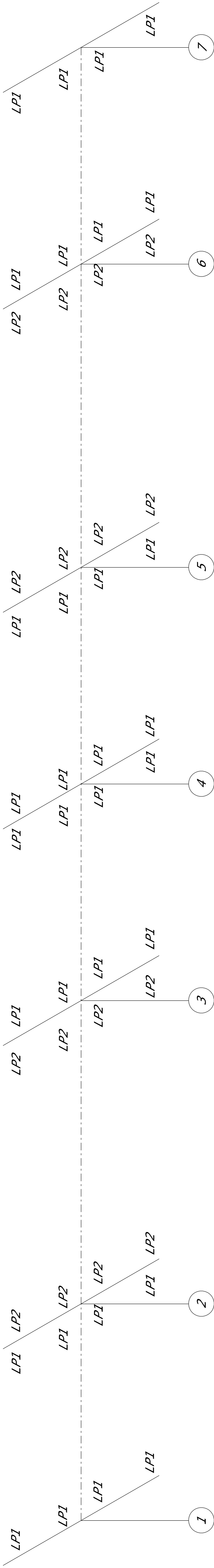


NOTE:
If there is no armored joint assembly present at end bent, then there shall be no 6" deep hammer removal at the joint but the bridge endwall shall be repaired as shown.

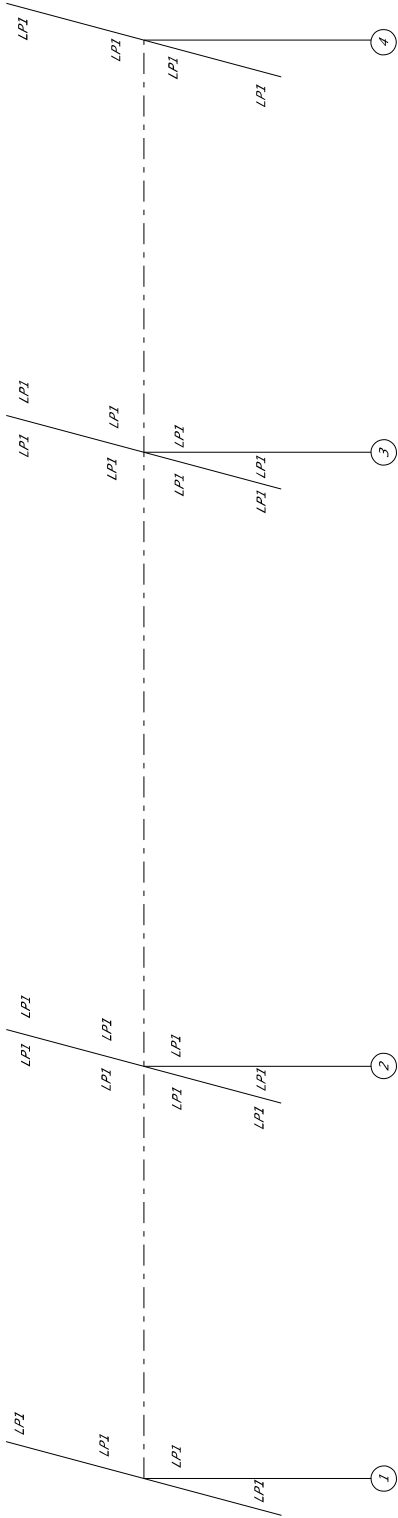
NOTE:
The new portion of the bridge endwall shall be rebuilt to match the new finish grade of the Polymer Cement Surface System.

- GENERAL NOTES:
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
 2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer, Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer. Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
 3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

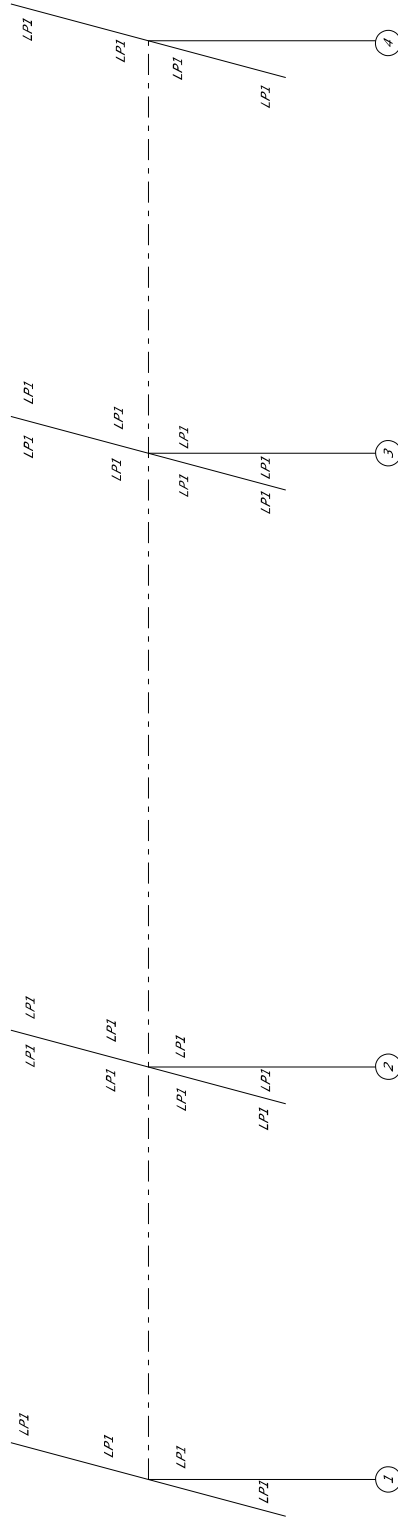
DETAIL "D"
Showing Repair Details Of End Wall, Reinforcing Steel, And Expansion Joint Formation.



BEARING PAD LAYOUT ~ BRIDGE 12281



BEARING PAD LAYOUT ~ BRIDGE 12283



BEARING PAD LAYOUT ~ BRIDGE 12284